Notification and Certification of Self-Implementing Cleanup and Disposal of PCB Remediation Waste

Locomotive Track 1 Improvement Project
AMTRAK Wilmington Former Fueling Facility
(DE-0266)
4001 Vandever Ave.
Wilmington, DE

August 2016

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1 Introduction

Stantec Consulting Services, Inc. (Stantec), on behalf of National Railroad Passenger Corporation (Amtrak), has prepared this *Notification and Certification of Self-Implementing Cleanup & Disposal of PCB Remediation Waste - Planned Track 1Improvement Project* at the Amtrak Wilmington Maintenance Shops located along Vandever Avenue in Wilmington, Delaware (**Figure 1**). Two projects are currently ongoing at the Amtrak Wilmington Maintenance Shops under the Delaware Voluntary Cleanup Program (VCP) enacted under 7 Del. C. Chapter 91: Delaware Hazardous Substance Cleanup Act (HSCA). These are the Former Fueling Facility (DE-0266) and Maintenance Facility (DE-0170) projects. Locomotive Track 1 is located within the Maintenance Facility (DE-0170) area; however, this location is within the Outfall 007 drainage area which has been included in the Remedial Investigation/Supplemental Focused Feasibility Study (RI/SFFS) for the Former Fueling Facility (DE-0266). The Outfall 007 drainage area drains to the Eastern Drainage Ditch located in the Former Fueling Facility. Therefore, the Locomotive Track 1 Improvement Project is being considered as operational unit 4 (OU-4) of DE-0266. The Locomotive Track 1 vicinity map is provided as **Figure 2**.

The planned Locomotive Track 1 improvements will be limited to approximately 750 feet in length of track, 9 feet in width and two feet below grade. This project will entail removing ties, rail and soil to a depth of two feet below ground surface. The location of Locomotive Track 1 is depicted on **Figure 3**.

The Locomotive Track 1 Improvements Project will be conducted in the Outfall 007 drainage area of the Former Fueling Facility, which drains to the Eastern Drainage Ditch. The Outfall 007 drainage area outside of the Locomotive Track-1 Improvement Project will be addressed as part of the on-going Remedial Investigation associated with DE-0266 (OU-3). Due to the projected construction schedule, the Locomotive Track 1 improvements are being addressed separately. Areas geographically located outside of the footprint of Locomotive Track 1 will be addressed as part of the VCP for DE-0266. Therefore, this Application only pertains to areas described as Locomotive Track 1, within the perimeter of the planned improvements as shown on **Figure 3**.

There are three other projects at the Facility with approved Self-Implementing PCB Remediation Plans. These projects consist of the ACS-64 Test/Warranty Center (OU-1 of DE-0266), the Car Shop Relocation Building (OU-2 of DE-0266), and the Building 15.1 Equipment Enclosure (within DE-0170). Another Self-Implementing PCB Remediation

Plan for the planned Wreck Track Improvement Project (OU-2 of DE-0170) has been submitted to USEPA for review.

1.1 Purpose

As mentioned above, the Amtrak Wilmington Maintenance Shops includes the Former Fueling Facility and the Maintenance Facility (refer to **Figure 2**). A Supplemental Focused Feasibility Study Report (Supplemental Phase II RI/FFS) dated March 28, 2014 (included in **Appendix A**) was submitted in order to present remedial alternatives for the Former Fueling Facility. The Supplemental Phase II RI/FFS Report was prepared to address Department of Natural Resources and Environmental Control (DNREC) and United States Environmental Protection Agency (USEPA) comments to the *Draft Phase II Remedial Investigation/Focused Feasibility Study Report, Amtrak Former Fueling Facility (DE-0266), Wilmington, Delaware* (Draft Phase II RI/FFS Report) submitted to DNREC in July 2007. The plan included adding a 29-acre drainage area (the Outfall 007 Drainage Area) in the evaluation of the Former Fueling Facility because it drains into the Eastern Drainage Ditch (adjacent to the Former Fueling Facility). Through additional correspondence and a meeting conducted with DNREC and the EPA (June 8, 2015), a plan was developed for collection of data prior to performing additional evaluations. The Locomotive Track 1 Improvements Project will be conducted in the Outfall 007 drainage area of the Former Fueling Facility which drains to the Eastern Drainage Ditch.

The Maintenance Facility project (DE-0170) is currently being investigated under the VCP. A *Revised Remedial Investigation/Focused Feasibility Study (RI/FFS) Work Plan, Amtrak Wilmington Maintenance Facility*, dated April 2012 (Revised RI/FFS) and *Addendum to the RI/FFS Work Plan*, dated June 6, 2012 were submitted to DNREC and USEPA in order to investigate soil, groundwater, sediment, and surface water in this portion of the facility. The RI/FFS Work Plan and the Revised RI/FFS with the addendum are included as **Appendix B**. An *Interim Data Submittal Remedial Investigation, Amtrak Wilmington Maintenance Facility* dated March 2015 (Interim Data Submittal) was also submitted to DNREC and USEPA. The Interim Data Submittal was submitted in order to provide the Agencies with data collected during the RI for DE-0170. Additional investigations were proposed in the Interim Data Submittal. The Interim Data Submittal is included as **Appendix C**.

This Application has been prepared to address the characterization and removal of soils in the footprint of the Locomotive Track 1 Improvements Project in accordance with USEPA self-implementing polychlorinated biphenyls (PCB) remediation rule under 40 CFR 761.61(a) and (c).

From a Delaware VCP perspective, investigations for the Locomotive Track 1 activities were described in the Remedial investigation (RI) for OU-4 (DE-0266) and will be discussed further in Section 2. A Remedial Investigation Report for the Locomotive Track 1 Improvement Project was submitted to DNREC on July 22, 2016.

1.2 Site Description

As discussed, the Amtrak Wilmington Shops is comprised of two facilities: the Maintenance Facility and the Former Fueling Facility (refer to **Figures 2** and **3**). The Former Fueling Facility is situated to the south of the former Roundhouse, to the west of the Eastern Drainage Ditch, and to the east of the Western Drainage Ditch. The area of investigation for the Former Fueling Facility encompasses approximately 54 acres (excluding the 29-acre Outfall 007 drainage area of the Maintenance Facility). To the east of the Former Fueling Facility is an access road called Railcar Avenue. Further to the east of the access road is the former Consolidated Rail Corporation (CONRAIL) Edgemoor Yards, which is now owned and operated by Norfolk Southern (NS); a tank car cleaning, maintenance and repair company; and an asphalt plant. The land to the west of the Former Fueling Facility, formerly operated by Atlas Sanitation, is now a materials recycling facility. The area to the south of 12th Street is referred to as the Brandywine Industrial Complex. In areas where electric transformers were previously located in the Brandywine Industrial Complex, PCB levels of up to 1,970 milligrams per kilogram (mg/kg) have been recorded.

The Maintenance Facility is located north of the Former Fueling Facility. The Maintenance Facility is bounded to the east by the Norfolk Southern Yards, to the north by Shellpot Creek, and to the west by active mainline Amtrak track (**Figure 2** presents the site vicinity). As indicated in **Figure 3** and mentioned previously, for the purposes of this investigation, the Maintenance Facility is considered the Amtrak property north of the former roundhouse (the former roundhouse area was evaluated as part of the Former Fueling Facility remedial investigation). The Maintenance Facility area of investigation encompasses approximately 52 acres; of which approximately 36 acres is paved or under building roof and 16 acres is unpaved.

A Pollution Minimization Plan (PMP) (dated September 28, 2005) for the Amtrak Wilmington Yard was prepared in accordance with the Delaware River Basin Commission (DRBC) PMP Rule 4.30.9. The PMP was developed and is being implemented to reduce the discharge of PCBs from the facility. A new PMP was

submitted to DNREC and DRBC on August 30, 2013 for review (as required by the National Pollutant Discharge Elimination System (NPDES) permit for the facility).

Locomotive Track 1 is located within the Outfall 004 drainage area of the Former Fueling Facility. The planned footprint of the Locomotive Track 1 Improvement Project is approximately 6,750 sq ft. (0.15 acres) in area (approximately 750 feet by 9 feet) and is located to the east of the main entrance road in the Maintenance Facility portion of the Site (refer to **Figure 3**). Locomotive Track 1 will be excavated to a depth of two feet below grade.

1.3 Application Organization

The contents of this Application are structured to provide essential elements of USEPA's requirements for Notification and Certification of Self-Implementing on-site Cleanup and Disposal of PCB Remediation Waste as found in 40 CFR 761.61(a)(3). The following is a summary of the contents of this Application pursuant to 40 CFR 761.61(a)(3).

[A] The nature of the contamination including kinds of materials contaminated.

A discussion of the results of soil investigations in the 0.15 acre Locomotive Track 1 footprint is described in Section 2. As previously discussed, soil investigations were conducted. The results of the soil characterization are also presented in Section 2.

[B] A summary of the procedures used to sample contaminated and adjacent areas and a table and cleanup site map showing PCB concentrations measured in all pre-cleanup characterization samples. The summary must include sample collection and analyses dates.

Procedures used to sample the Site are described in Section 2. A data table (**Table 1**) and a Soil Sample Location Map (**Figure 4**) are also included.

[C] The location and extent of the identified contaminated area, including topographic maps with sample collection sites cross-referenced to the sample identification numbers in the data summary from paragraph (a)(3)(i)(B) of this section.

Maps depicting sample locations, concentrations and extent of contamination are also included in Section 2 and discussion of the excavation of soil is described in Section 3 (Proposed Soil Remedial Action). A topographic map is included as **Figure 1,** a sample

location map is provided as **Figure 4**, and a analytical data summary table is provided as **Table 1**.

[D] A cleanup plan for the site including a schedule, disposal technology, and approach. This plan should contain options and contingencies to be used if unanticipated higher concentrations or wide distributions of PCB remediation waste are found or other obstacles force changes in the cleanup approach.

A cleanup plan for the Locomotive Track 1 Improvements Project footprint (site) including approach, schedule, disposal technology and contingencies is included in Section 3 (Proposed Soil Remedial Action). As described in Section 3, soil excavation will be performed to a depth of approximately 2.0 feet below ground surface for the entire footprint. All excavated soils will be managed at the designated temporary soil handling location, and shipped for off-site disposal at the appropriate landfill based on soil data. TSCA soils will be disposed at US Ecology's Bellevue, MI or Idaho facility. Soils less than or equal to 50 mg/kg PCBs will be disposed at a facility determined based on characterization sampling.

[E] A written certification signed by the owner of the property and the party conducting the cleanup, that all the documentation required by 40 CFR 761.61(a)(3)(E) is on file at the location designated in the certificate and is available for USEPA inspection.

Certifications signed by the owner of the property and the party conducting the remediation (Amtrak) indicating the location of the documentation required by 40 CFR 761.61(a)(3)(E) are included in **Appendix D**.

The remainder of this Application is organized as follows:

- Section 2 – summarizes the soil investigation activities previously conducted and on-going soil investigations.
- Section 3 – summarizes the proposed soil remedial action including post-excavation verification sampling program and site restoration plan.
- Section 4 – presents the project Quality Assurance Plan.
- Section 5 – presents the project Health and Safety Plan.
- Section 6 – presents the project Implementation Schedule.

2 Locomotive Track 1 Improvement Investigations

Historical remedial investigations have included the collection of soil samples from the Locomotive Track 1 footprint. The Locomotive Track 1 footprint has been identified as operable unit 4 (OU-4) of the Former Fueling Facility (DE-0266). These sampling events are described below.

2.1 Historical Soil Sampling

Several soil investigations had been performed in the Maintenance Facility and the Former Fueling Facility, prior to Amtrak's Locomotive Track 1 Improvement investigation. A summary of prior soil investigations was included in the *Revised RI/FFS Work Plan* and the Addendum to the RI/FS Work Plan previously submitted to USEPA and DNREC (electronic versions of the WMF RI/FFS Work Plan and Addendum are included in **Appendix C**). An *Interim Data Submittal* was submitted to DNREC and USEPA in March 2015 and describes results of surface and subsurface soil, sediment, surface water, and groundwater sampling (**Appendix B**), including samples within the planned footprint of Locomotive Track 1.

As part of historical soil investigations, six soil borings were advanced in the footprint of the Locomotive Track 1 Improvement Project. The location of these historical soil borings are identified on **Figure 4**. Concentrations of PCBs were reported in historical soil boring samples from SB-68 (ranging from non-detect to 6.4 mg/g), and surface soil samples (0 to 2 feet bgs) TS-2012-28 (7.5 mg/kg), TS-2012-29 (18 mg/kg), TS-2012-30 (1.42 mg/kg), TS-2012-31 (9.7 mg/kg), and TS-2012-33 (36 mg/kg). A detailed description of sampling methodologies and a summary of the analytical results was included in the reports mentioned above.

2.2 June 2016 Soil Sampling

During June 2016, soil borings were advanced using a stainless steel hand auger. Within the Locomotive Track 1 Improvement footprint, soil borings were advanced to a planned excavation depth of two feet bgs at 10 ft linear spacing. Samples were collected from 0.0 to 0.3 ft bgs, 0.5 to 0.8 ft bgs, 1.0 to 1.3 ft bgs, and 1.5 ft to 1.8 ft bgs at each soil boring location in order to characterize the PCB concentration in soil at the planned depth of excavation. All samples were analyzed for PCBs by Method 8082. All soil samples were extracted by Method 3550B (sonication).

In June 2016, a total of 284 soil samples were collected from 72 soil borings. Soil results are summarized in **Table 1** and the soil boring locations are depicted on **Figure 4**. Soil samples were analyzed for PCBs using Method 8082 by Eurofins Lancaster Laboratories

(a Delaware VCP-approved laboratory). The laboratory data reports are included in **Appendix E**. As indicated in **Table 1**, total PCB concentrations were reported ranging from 0.041 mg/kg (LT-21(1.0-1.3)) to 248 mg/kg (LT-25(0.0-0.3)). Ten of the 284 soil samples, LT-1(0.0-0.3), LT-8(0.5-0.8), LT-16(0.5-0.8), LT-23(1.0-1.3), LT-24(0.0-0.3), LT-25(0.0-0.3), LT-65(0.0-0.3), LT-67(0.0-0.3), LT-69(0.5-0.8), and LT-71(0.0-0.3) reported PCB concentrations above 50 mg/kg. As indicated, no samples collected at a depth of 1.5 to 1.8 feet bgs reported PCB concentrations above 50 mg/kg.

As will be discussed further in Section 3.3, the footprint will be excavated to a depth of 2 feet bgs. Post-excavation soil sampling and soil management will be conducted in accordance with 761 Subpart O.

2.3 June 2016 Remedial Investigation for Compliance with DNREC's VCP

A *Remedial Investigation Work Plan* (RI Work Plan) was submitted to DNREC via email on April 18, 2016 in order to fulfill DNREC's requirements under the VCP. Stantec had previously informed DNREC about the planned Locomotive Track 1 Improvement Project during communication on April 7, 2016. As discussed in the RI Work Plan, soil samples were collected for PCBs by Method 8082. The RI Work Plan is provided as **Appendix F**.

As part of the Remedial Investigation, five soil borings (LT-0, LT-19, LT-38, LT-57, and LT-70) were advanced to the soil/groundwater interface at approximate 200 foot linear spacing along Locomotive Track 1. Samples were collected from below the planned excavation depth (2.0 feet bgs) to the water table, which ranged from 2.5 to 3.0 feet bgs. The purpose for this sampling was to identify concentrations of potential constituents of concern in soil that will remain after excavation.

Soil samples were collected and analyzed for VOCs (Method 8260B), SVOCs (Method 8270C), TPH-DRO and TPH-GRO (Method 8015), PCBs (Method 8082), and TAL metals (Method 6061 & 7471B). PCB samples were collected in three-inch intervals for every six inch vertical interval from 2.0 feet bgs to the top of the water table. Every six inch interval was isolated and field screened utilizing a photoionization detector (PID). VOC samples were collected from the six inch interval representing the highest PID reading or the six inch interval above the water table. SVOC, TPH-DRO, TPH-GRO, and TAL-Metals samples were collected from 2 feet. to the top of the water table. Samples collected for PCBs were extracted by Lancaster Labs (a DNREC HSCA/VCP certified lab) using EPA method 3550B according to 40 CFR 761.272. QA/QC samples were collected at a frequency of one duplicate, one matrix spike (MS), and one matrix spike duplicate (MSD) per 20 samples in addition to daily equipment blanks.

The soil data was summarized in the Remedial Investigation Report - Planned Locomotive Track 1 Replacement Soil Characterization dated July 2016 (**Appendix F**). A summary of the data is provided below:

- No VOCs were detected above the laboratory method detection limit
- TPH-GRO was not detected above the DNREC-SIRS Screening Levels for Soil in any soil samples.
- TPH-DRO was detected above the DNREC-SIRS Screening Levels for Soil at LT-0 (2.0-2.5)
- SVOCs – benzo(a)pyrene, benzo(b)fluoranthene and dibenz(a,h)anthracene were detected above the DNREC-SIRS Screening Levels for Soils at LT-0(2.0-2.5)
- PCBs – 4 of the 6 samples for PCBs reported concentrations above the DNREC-SIRS Screening Levels for Soils (the highest PCB concentration detected was 3.7 mg/kg).
- Metals – Lead at LT-0(2.0-2.5) and arsenic at LT-70(2.0-2.5) were detected above the DNREC-SIRS Screening Level for Soils.

The soil below the depth of the planned excavation or the depth where additional soil excavation is required to meet the target cleanup level for PCBs based on post-excavation sampling will be left in place and will be covered with clean fill, rail ties and an active rail line, which will collectively function as a cover preventing physical contact with the underlying soil.

3 Proposed Soil Remedial Action

As mentioned in Section 2, Amtrak has indicated plans to remove the soil over the entire footprint of the Locomotive Track 1 Improvement Project to a depth of 2.0 ft bgs. All soil identified greater than 50 mg/kg PCBs will be disposed at a TSCA Landfill (US Ecology's Bellevue, MI or Idaho facility) based on characterization sampling. The remaining soil will be disposed at a facility licensed to handle soil less than or equal to 50 mg/kg PCBs based on soil characterization. As described in Section 2, Stantec collected soil samples at 72 soil boring locations (284 soil samples in total) within the Locomotive Track 1 Improvement Project footprint during June 2016. Four samples were collected from each soil borings at intervals of 0.0 to 0.3 ft bgs, 0.5 to 0.8 ft bgs, 1.0 to 1.3 ft bgs, and 1.5 to 1.8 ft bgs. As indicated on **Table 1**, the PCB concentrations collected during the June 2016 investigation ranged from 0.041 mg/kg (LT-21(1.0-1.3)) to 248 mg/kg (LT-25(0.0-0.3)).

Verification samples will be collected within the Locomotive Track 1 Improvement Project footprint following soil removal. The proposed remedial action for soil within the footprint of the Locomotive Track 1 footprint is described below. Soils outside the footprint are planned to be addressed in the future as part of the investigation and remediation of the Amtrak Wilmington Former Fueling Facility (DE-0266).

3.1 Soil Excavation and Excavated Soil Management

Soil will be excavated for the entire footprint of the Locomotive Track 1 Improvement Project to a depth of 2.0 feet bgs. Ten of the 284 soil samples from the June 2016 sampling event reported PCB concentrations in soil greater than 50 mg/kg within the planned excavation. The soil identified at concentrations greater than 50 mg/kg will be disposed at a TSCA-licensed facility. Rail ties within these areas will also be disposed at a TSCA-licensed facility. Remaining soil and rail ties will be disposed at a facility licensed to handle soil less than or equal to 50 mg/kg PCBs. These results were discussed in Section 2.2. Equipment that handles PCB material with concentrations greater than 50 mg/kg will be decontaminated per 40 CFR 761 Subpart S prior to handling any material less than or equal to 50 mg/kg PCBs. As will be discussed in Section 3.3, post-excavation verification soil sampling will be conducted per 40 CFR 761 Subpart O.

The Locomotive Track 1 footprint consists of a track bed that is occupied only by mobile railroad equipment, which is staged in this area while the equipment is not in use. The

track is only occupied during train movements when a spotter may remove or place a secondary shunting device on the track.

As described in Section 1.1, this Application has been prepared to address the characterization and removal of soils in the footprint of the proposed excavation in accordance with EPA self-implementing PCB remediation rule under 40 CFR 761.61(a) and (c). In addition, from a Delaware VCP perspective, the removal of soil related to the Locomotive Track 1 Improvement Project will be addressed as a Remedial Investigation for OU-4 (Locomotive Track 1 Improvement Project) under the VCP for the Former Fueling Facility (DE-0266). Areas outside of the proposed footprint of the planned excavation will be addressed as part of the VCP for the Former Fueling Facility (DE-0266). Since the area outside the footprint of the planned excavation is still being assessed, the clean-up criteria have not yet been established.

Soils are planned to be excavated as follows:

1. Soils identified with PCB concentrations greater than 50 mg/kg within the Locomotive Track 1 Improvement Project footprint will be excavated to a depth of 2.0 feet bgs and temporarily placed in the soil stockpile area. For areas with PCB concentrations greater than 50 mg/kg, soil will be excavated within the footprint of the Track 1 Project to the next sample location where PCB concentrations were identified less than or equal to 50 mg/kg PCBs (**Figure 4**). Any equipment that comes in contact with this soil will be decontaminated per 40 CFR 761 Subpart S prior to excavating any other soil. Soils identified with PCB concentrations less than or equal to 50 mg/kg will then be excavated to the planned excavation depth of 2.0 feet bgs and temporarily staged in the soil stockpile area, isolated from the stockpiled soil greater than 50 mg/kg PCBs. Soils from the excavation will be shipped off-site to an appropriate disposal facility. Post-excavation sampling will confirm the extent of excavation vertically in accordance with 40 CFR 761 Subpart O. Additional excavation may be necessary within the base of the excavation to meet the clean-up target based on post excavation sampling. The outside walls of the excavation area will be marked with a marker geotextile. No excavation is planned for areas outside the footprint.

2. The bottom of the excavation will be lined with a delineation material (snow fence or equivalent) and marked with a PCB mL label if PCB concentrations in soil are identified greater than 25 mg/kg and equal to or less than 50 mg/kg.

Excavated soils will need to be handled and managed for a short period of time while the excavator is removing soils from the ground and other equipment is loading soil into trucks for transport to landfills. A stockpile area has been constructed in order to

support several infrastructure projects on the facility, consistent with previously approved 761.61(a) plans. The location of the stockpile area is depicted on **Figure 3**.

The soil handling area was constructed and maintained utilizing the technical parameters described in 40 CFR 761.65(c)(9). The soil staging area was included in the previously approved *Notification and Certification of Self-Implementing Cleanup and Disposal of PCB Remediation Waste ACS-64 Test/Warranty Building*, dated July 2, 2014 and *Notification and Certification of Self-Implementing Cleanup and Disposal of PCB Remediation Waste Car Shop Relocation Building*, dated August 2015 and approved by the USEPA in a letter dated September 8, 2015. The designated soil handling area details are depicted in **Appendix G**. The stockpile area was constructed on a smooth area free of potential deleterious material. Geotextile fabric was placed over the entire soil handling area footprint. A 10-mil (HDPE) liner was installed over the geotextile fabric. The liner was draped and secured over jersey barriers surrounding the area. Soil management areas were designated within the area. Soil and other material from the Locomotive Track 1 excavation will be covered with 10-mil liner and secured with ballast within the designated soil handling area. A summary of how the conditions of 40 CFR 761.65(c)(9) are met with the design of the soil handling area is included in **Appendix G**.

Concrete, asphalt and other debris that may be encountered will also be staged in the soil handling area. This material will be staged and covered. Waste characterization will be performed for off-site disposal based on the receiving facility sampling requirements.

Erosion and sedimentation controls will be maintained throughout the project. It is not anticipated that groundwater will be encountered during construction activities.

3.2 Clean-up Level

The proposed cleanup level for the soil in this area is 50 mg/kg, consistent with the low occupancy criteria within TSCA 761.61. The low occupancy cleanup level is selected because the footprint is occupied only by railroad equipment with occasional occupancy to remove/replace secondary shunting devices (the occasional occupancy is less than the 6.7 hrs./week as defined in 40 CFR 761.3 for low occupancy. In the event that PCBs are identified in the post-excavation samples at a concentration greater than 50 mg/kg, this soil will be excavated until post-excavation samples less than 50 mg/kg are achieved. In the event that PCBs are identified in post-excavation samples greater than 25 mg/kg and less than or equal to 50 mg/kg in the footprint of

the Locomotive Track Improvement Project, Amtrak requests an alternate cleanup level under the provisions of 761.61(a) and 761.61(c), the conditions are:

- Fencing around the entire property will be utilized to restrict access and will be marked with a PCB ML mark [761.61(a)(4)(i)(B)(2) and posted at all visible entrances, and
- Deed restrictions will be implemented [761.61(a)(8)] indicating the location and concentration of PCBs in soils remaining in the footprint of the Locomotive Track Project.

In the event that PCBs are identified in post-excavation samples less than or equal to 25 mg/kg, the soils will be left in place without restrictions (761.61(a)(4)(i)(B)(1)) and deed restrictions would be implemented.

Verification post-excavation sampling will be conducted in accordance with Section 3.3 of this Application.

As described previously, because the footprint of the planned Locomotive Track 1 Improvement Project is surrounded by areas being considered within the Former Fueling Facility (DE-0266) under the Delaware VCP program, the remedy and clean-up criteria for the Former Fueling Facility project will apply for areas outside of the footprint. This evaluation is being conducted in accordance with agency (DNREC and EPA) oversight.

3.3 Verification Sampling

As described above and in Section 3, post-excavation soil samples will be collected following excavation activities. Sampling will be conducted in accordance with 40 CFR 761 Subpart O. Samples will be collected every 5 linear feet at the bottom of the excavation and analyzed for PCBs by Method 8082. Additionally, samples will be collected every 5 linear feet from each sidewall and analyzed for PCBs by Method 8082. For post-excavation sample analysis, EPA extraction Methods 3540C (soxhlet) or 3550B (sonication) will be utilized.

However, should sampling indicate soil PCB concentrations remain above the target cleanup criteria, additional soil excavation will be performed within the footprint as will be discussed in Section 3.4.

3.4 Contingency

As described above and in Section 3.3, post-excavation soil samples will be collected following excavation activities. However, should sampling indicate soil PCB

concentrations remain above the target cleanup criteria, additional soil excavation will be performed within the footprint. Additional post-excavation sampling will be performed after the additional excavation is complete in accordance with 40 CFR 761 Subpart O. This process will be repeated until verification sampling indicates target soil cleanup criteria have been met as described in Section 3.1. For post-excavation sample analysis, EPA extraction methods 3540C (soxhlet) or 3550B (sonication) will be utilized.

If additional soil excavation is necessary, soils will be managed as described in Section 3.1. Additional excavation will only occur vertically and no additional soil excavation will occur on the excavation side walls.

3.5 Deed Restriction

PCB soils equal to or less than 50 mg/kg may remain within the Locomotive Track 1 footprint after excavation and the facility fencing will be utilized to restrict access in accordance with 761.61(a)(4)(i)(B)(2). Additionally, a Deed Restriction will be placed over the Locomotive Track 1 footprint which was subject to the improvement project in accordance with 761.61(a)(8) if soil is identified greater than 25 mg/kg PCBs and less than or equal to 50 mg/kg PCBs. The Deed Restriction on this portion of the property is required to further restrict access and property use in this area and will indicate the location and concentrations of PCBs in soil remaining in the footprint of the Locomotive Track 1 Project area. The Deed Restriction will be recorded with the deed of the property, as notice that the property has had a PCB remediation and that the area must be maintained pursuant to Section 761.61(a)(8). Once the deed restriction has been completed, a certification to EPA stating the restriction has been recorded on the deed will be submitted to EPA per 761.61(a)(8)(i)(B).

Long-term stewardship and operation and maintenance plans will be prepared in accordance with the VCP requirements and approved by DNREC. These plans will be coordinated with DNREC with the overall Former Fueling Facility Project (DE-0266).

4 Quality Assurance Project Plan

As described in Sections 2 and 3 of this Application, soil samples were collected prior to soil excavation activities in order to assess the extent of excavation required. These samples were submitted for laboratory analysis. The sampling requirements including matrix, analytical parameter, analytical method, sample preservation, sample container volume and type, and holding time are provided in the summary table below.

REMEDIAL INVESTIGATION AND VERIFICATION SOIL SAMPLING

Matrix Type	Analytical Parameter	Analytical Method	Sample Preservation	Sample Container	Sample Holding Time
Soil	Polychlorinated Biphenyls	USEPA Method 8082	Cool 4° C +/- 2° C	Glass Jar 4 oz. glass	14 Days

All laboratory analyses were performed by Eurofins Lancaster Laboratories, Inc. of Lancaster, Pennsylvania which is a DNREC-approved and HSCA-certified laboratory. As such, the laboratory data quality, data documentation, equipment calibration, and preventative maintenance requirements of the DNREC Contract Laboratory protocol were adhered to. Any variations to the protocol would be noted in the laboratory analytical report for the associated sample(s).

Future sampling required for excavation verification, waste characterization and other project related matters will follow similar protocol. Additionally, the following QA/QC samples will also be collected:

- One equipment blank (rinsate blank) will be prepared per day of sampling activities. The equipment blank will be prepared by pouring the laboratory-prepared water over one piece of freshly decontaminated sampling equipment and capturing the water into sample jars. The equipment blank jar will be labeled with the analysis to be performed and the date and time of sampling. This information will then be transferred to the chain of custody.

- Matrix Spike/Matrix Spike Duplicates will be collected at a frequency of 1 per 20 soil samples. Matrix spike/matrix spike duplicates are used to assess laboratory accuracy and precision. The samples to be utilized for matrix spike/matrix spike duplicate analysis will be collected from areas where contamination is suspected to be present. The sample label will note that the sample is to be used for matrix spike/matrix spike duplicate analysis by the laboratory.

- Duplicate samples will be collected at a frequency of 1 per 20 soil samples. Duplicate samples help to evaluate field and laboratory precision.

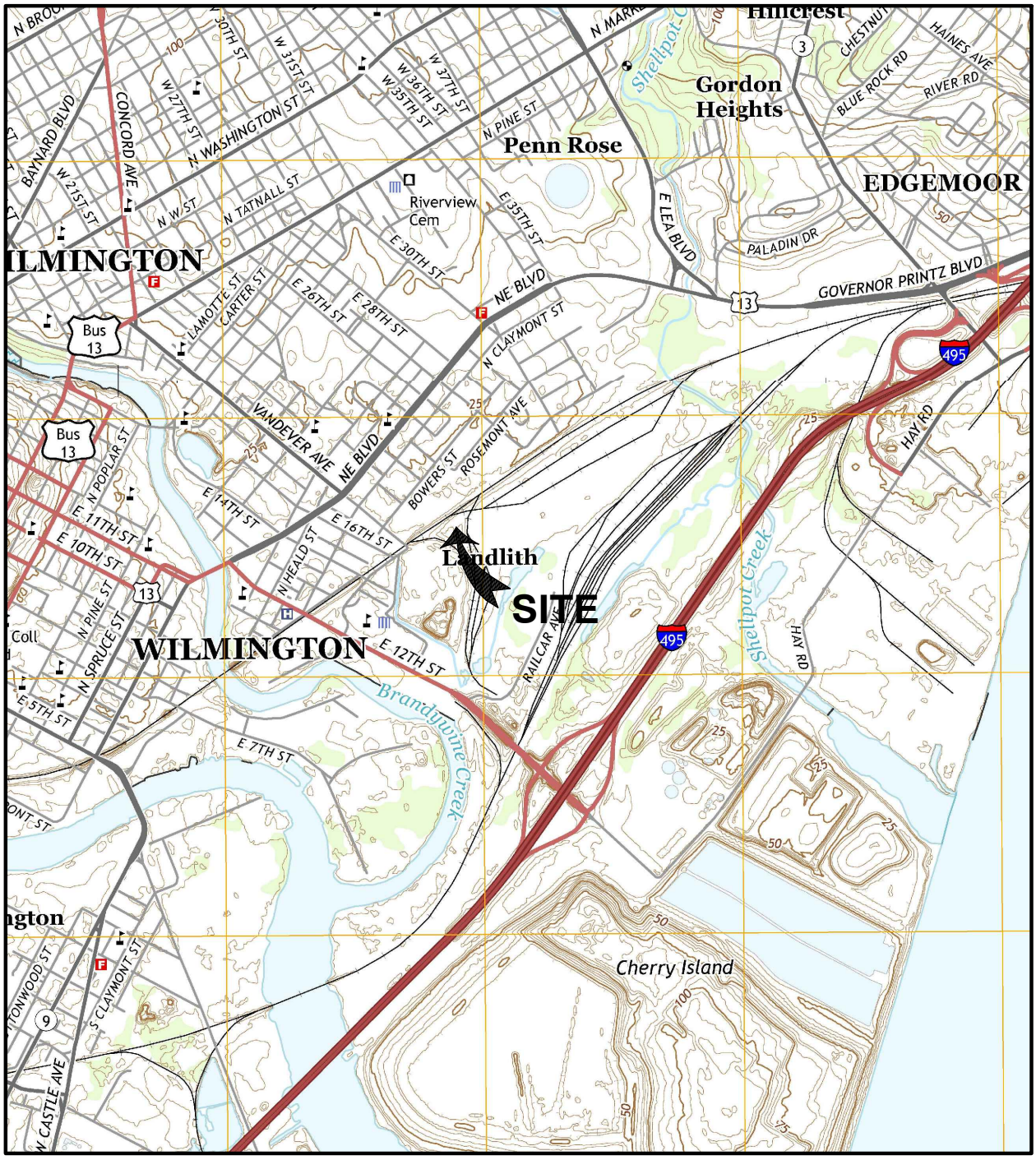
5 Health and Safety

Stantec performed its tasks In accordance with Stantec's site specific Health and Safety Plan (available upon request and at the project site during all Stantec activities). The Health and Safety Plan includes procedures and action levels for the remedial investigation activities. The Health and Safety Plan details Stantec's safety requirements; job safety analyses; a description of the monitoring requirements; personnel protective equipment; and medical monitoring and Site control. The Site specific Health and Safety Plan complies with Occupational Safety and Health Administration regulations.

6 Implementation Schedule

Amtrak intends to conduct the Locomotive Track 1 Improvement Project during CY 2016. The specific dates for initiation of construction are dependent on Amtrak's schedule. Stantec will provide USEPA with notification of the schedule for construction activities as it becomes available and no less than two weeks prior to initiation of activities.

Figures



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5/7/2015 2:22 PM

ORIGINAL SHEET - ANSI A

01/2014
213402422

Stantec

1060 Andrew Drive, Suite 140
West Chester PA

Client/Project
AMTRAK
WILMINGTON MAINTENANCE FACILITY
WILMINGTON, DE

Figure No.
1

Title
SITE LOCATION AND TOPOGRAPHIC MAP
BUILDING 15.1 EQUIPMENT ENCLOSURE

Stantec

Legend

LOCOMOTIVE TRACK 1 IMPROVEMENT AREA

WILMINGTON MAINTENANCE YARD PROJECT BOUNDARY

0 400 800 1,200 1,600 Feet

1:4,800 (At original document size of 22x34)

N

Notes

1. Coordinate System: NAD 1983 StatePlane Delaware FIPS 0700 Feet
2. Source: Stantec
3. Aerial & Topo Copyright:© 2013 National Geographic Society, i-cubed Image courtesy of USGS Earthstar Geographics SIO © 2016 Microsoft Corporation . Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

Project Location
213402048

CITY OF WILMINGTON
NEW CASTLE COUNTY, DE

Prepared by GWC on 7/18/2016
Technical Review by PSM on 7/18/2016

Client/Project
AMTRAK
MAINTENANCE YARD

Figure No.
2

Title
LOCOMOTIVE TRACK 1 VICINITY MAP

Stantec

Legend

- LOCOMOTIVE TRACK 1 IMPROVEMENT AREA
- BUILDING 15.1 EQUIPMENT ENCLOSURE
- WRECK TRACK REPLACEMENT
- PROPOSED CAR SHOP RELOCATION BUILDING
- PROPOSED ACS-64 BUILDING FOOTPRINT
- TEMPORARY SOIL HANDLING AREA
- WILMINGTON MAINTENANCE YARD PROJECT BOUNDARY

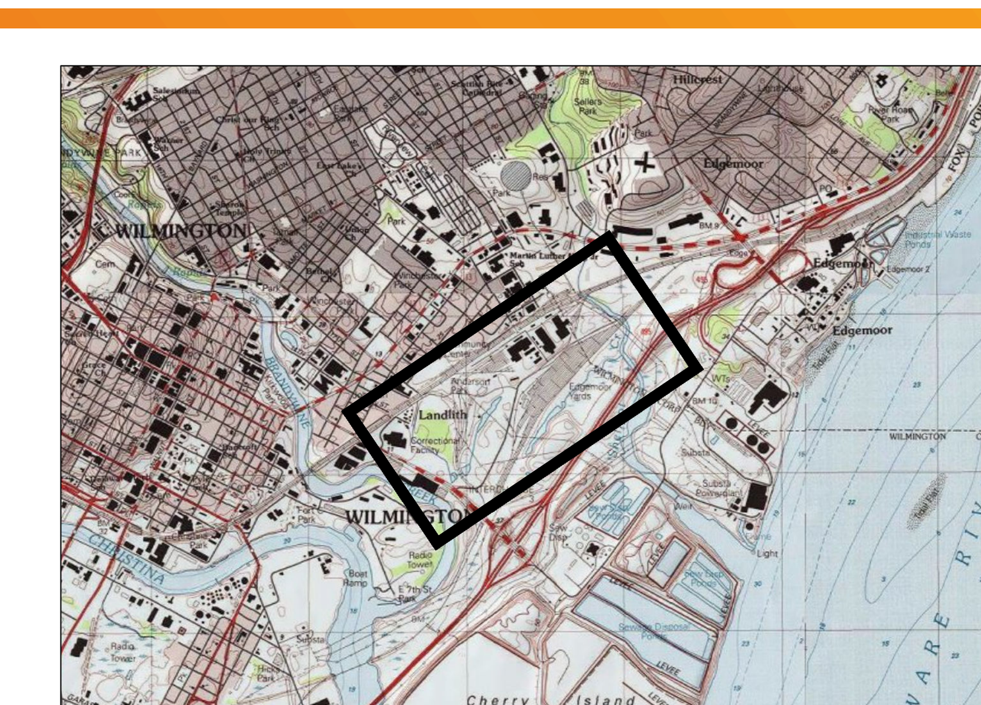
0 400 800 Feet

1:2,400 (At original document size of 22x34)

N

Notes

1. Coordinate System: NAD 1983 StatePlane Delaware FIPS 0700 Feet
2. Source: Stantec
3. Aerial & Topo Copyright:© 2013 National Geographic Society, i-cubed Image courtesy of USGS Earthstar Geographics SIO © 2016 Microsoft Corporation . Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation



Project Location 213402048

CITY OF WILMINGTON
NEW CASTLE COUNTY, DE

Prepared by GWC on 7/18/2016
Technical Review by PSM on 7/19/2016

Client/Project
AMTRAK
MAINTENANCE YARD

Figure No.
3

Title
PLANNED LOCOMOTIVE TRACK 1 IMPROVEMENT PROJECT LOCATION

Stantec

Legend

- SOIL BORING LOCATION
- HISTORICAL SOIL BORING LOCATION
- >50 MG/KG PCB EXCAVATION LOCATIONS

Notes

1. Coordinate System: NAD 1983 StatePlane Delaware FIPS 0700 Feet
2. Source: Stantec
3. Aerial & Topo © 2016 Microsoft Corporation
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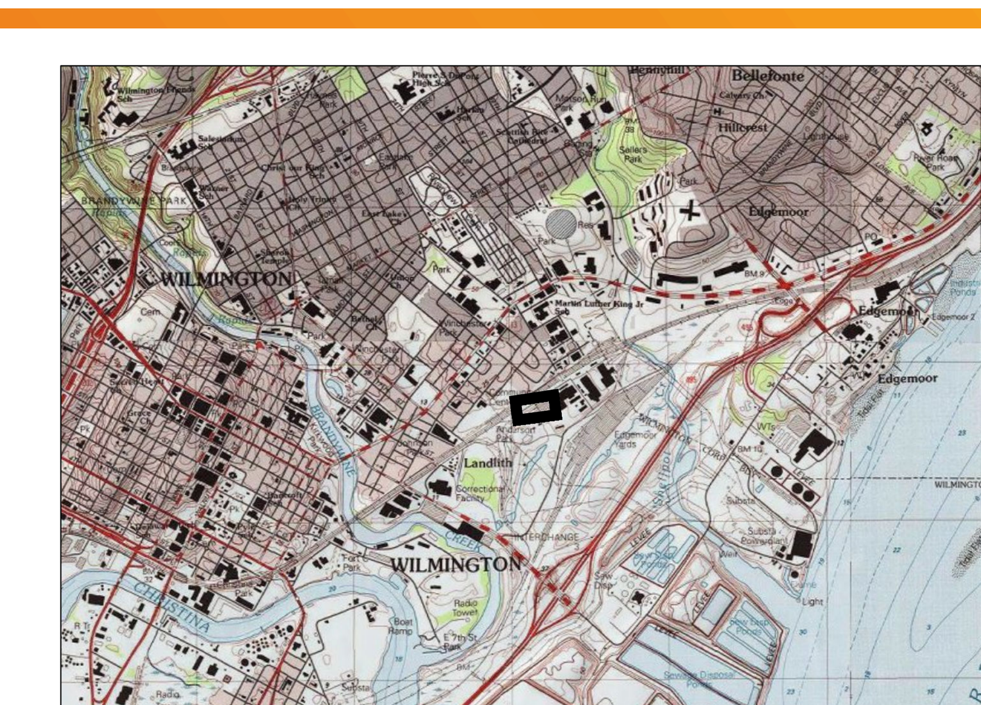
0 25 50 Feet
1:300 (At original document size of 22x34)

N



Project Location
CITY OF WILMINGTON
NEW CASTLE COUNTY, DE

213402048
Prepared by GWC on 7/12/2016
Technical Review by PSM on 7/19/2016
Independent Review by MAS on 7/18/2016

Client/Project
AMTRAK
MAINTENANCE YARD

Figure No.
4

Title
TRACK 1 SAMPLING LOCATIONS

Tables

Table 1
Amtrak Wilmington Maintenance Facility (DE-0266)
Locomotive Track 1 (OU-4)
PCB Results June 2016
4001 Vandever Avenue
Wilminton, Delaware

		Lab ID	8431920	8431921	8431922	8431923	8431415	8431386	8431387	8431388	8431391	8431431	8431394	8431395	8431702	8431411	8431412	8431413	8431414	8431404	8431410	8431407	8431408	8431409
		Sample Name	LT-0(0.0-0.3)	LT-0(0.5-0.8)	LT-0(1.0-1.3)	LT-0(1.5-1.8)	LT1(0.0-0.3)	LT1(0.5-0.8)	LT1(1.0-1.3)	LT1(1.5-1.8)	LT2(0.0-0.3)	DUP-15	LT2(0.5-0.8)	LT2(1.0-1.3)	LT-2(1.5-1.8)	LT3(0.0-0.3)	LT3(0.5-0.8)	LT3(1.0-1.5)	LT3(1.5-1.8)	LT4(0.0-0.3)	DUP-14	LT4(0.5-0.8)	LT4(1.0-1.3)	LT4(1.5-1.8)
		Sample Date	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016
		Analysis Date	6/28/2016	6/28/2016	6/29/2016	6/16/2016	7/1/2016	6/29/2016	6/29/2016	6/29/2016	7/1/2016	7/1/2016	6/30/2016	6/30/2016	7/1/2016	7/1/2016	7/1/2016	7/1/2016	7/1/2016	6/29/2016	7/1/2016	7/1/2016	7/1/2016	7/1/2016
PCB-1016	mg/kg		< 0.36	< 2.4	< 0.020	< 0.12	< 4.2	< 4.0	< 2.0	< 1.0	< 0.37	< 0.93	< 4.1	< 4.1	< 1.0	< 1.9	< 3.8	< 2.1	< 1.0	< 4.1	< 2.0	< 1.0	< 1.1	< 1.1
PCB-1221	mg/kg		< 0.36	< 2.4	< 0.020	< 0.12	< 4.2	< 4.0	< 2.0	< 1.0	< 0.37	< 0.93	< 4.1	< 4.1	< 1.0	< 1.9	< 3.8	< 2.1	< 1.0	< 4.1	< 2.0	< 1.0	< 1.1	< 1.1
PCB-1232	mg/kg		< 0.36	< 2.4	< 0.020	< 0.12	< 4.2	< 4.0	< 2.0	< 1.0	< 0.37	< 0.93	< 4.1	< 4.1	< 1.0	< 1.9	< 3.8	< 2.1	< 1.0	< 4.1	< 2.0	< 1.0	< 1.1	< 1.1
PCB-1242	mg/kg		< 0.36	< 2.4	< 0.020	< 0.12	< 4.2	< 4.0	< 2.0	< 1.0	< 0.37	< 0.93	< 4.1	< 4.1	< 1.0	< 1.9	< 3.8	< 2.1	< 1.0	< 4.1	< 2.0	< 1.0	< 1.1	< 1.1
PCB-1248	mg/kg		< 0.36	< 2.4	< 0.020	< 0.12	< 4.2	< 4.0	< 2.0	< 1.0	< 0.37	< 0.93	< 4.1	< 4.1	< 1.0	< 1.9	< 3.8	< 2.1	< 1.0	< 4.1	< 2.0	< 1.0	< 1.1	< 1.1
PCB-1254	mg/kg		< 0.36	< 2.4	< 0.020	< 0.12	< 4.2	< 4.0	< 2.0	< 1.0	< 0.37	< 0.93	< 4.1	< 4.1	< 1.0	< 1.9	< 3.8	< 2.1	< 1.0	< 4.1	< 2.0	< 1.0	< 1.1	< 1.1
PCB-1260	mg/kg		**2.4**	**28**	**0.087**	**1.3**	**57**	**33**	**26**	**13**	**2.3**	**5.0**	**33**	**45**	**17**	**15**	**35**	**16**	**6.3**	**25**	**18**	**6.8**	**5.0**	**5.7**
Total PCB Aroclors	mg/kg		**2.4**	**28**	**0.087**	**1.3**	**57**	**33**	**26**	**13**	**2.3**	**5.0**	**33**	**45**	**17**	**15**	**35**	**16**	**6.3**	**25**	**18**	**6.8**	**5.0**	**5.7**

		Lab ID	8431384	8431385	8431389	8431390	8431432	8431433	8431434	8431435	8431400	8431401	8431402	8431403	8431380	8431381	8431382	8431383	8431396	8431397	8431398	8431399	8431376	8431377	8431378	8431379
		Sample Name	LT-5(0.0-0.3)	LT-5(0.5-0.8)	LT5(1.0-1.3)	LT5(1.5-1.8)	LT-06(0.0-0.3)	LT-06(0.5-0.8)	LT-06(1.0-1.5)	LT-06(1.5-1.8)	LT7(0.0-0.3)	LT7(0.5-0.8)	LT7(1.0-1.3)	LT7(1.5-1.8)	LT-8(0.0-0.3)	LT-8(0.5-0.8)	LT-8(1.0-1.3)	LT-8(1.5-1.8)	LT9(0.0-0.3)	LT9(0.5-0.8)	LT9(1.0-1.3)	LT9(1.5-1.8)	LT-10(0.0-0.3)	LT-10(0.5-0.8)	LT-10(1.0-1.3)	LT-10(1.5-1.8)
		Sample Date	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016
		Analysis Date	6/29/2016	6/29/2016	6/29/2016	6/30/2016	7/1/2016	7/1/2016	7/1/2016	7/1/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016
PCB-1016	mg/kg		< 0.46	< 0.10	< 0.45	< 2.2	< 0.11	< 1.9	< 1.0	< 1.1	< 0.19	< 0.11	< 0.43	< 4.1	< 0.092	< 11	< 4.9	< 0.44	< 0.090	< 1.0	< 2.2	< 0.022	< 0.40	< 1.1	< 0.098	< 0.030
PCB-1221	mg/kg		< 0.46	< 0.10	< 0.45	< 2.2	< 0.11	< 1.9	< 1.0	< 1.1	< 0.19	< 0.11	< 0.43	< 4.1	< 0.092	< 11	< 4.9	< 0.44	< 0.090	< 1.0	< 2.2	< 0.022	< 0.40	< 1.1	< 0.098	< 0.030
PCB-1232	mg/kg		< 0.46	< 0.10	< 0.45	< 2.2	< 0.11	< 1.9	< 1.0	< 1.1	< 0.19	< 0.11	< 0.43	< 4.1	< 0.092	< 11	< 4.9	< 0.44	< 0.090	< 1.0	< 2.2	< 0.022	< 0.40	< 1.1	< 0.098	< 0.030
PCB-1242	mg/kg		< 0.46	< 0.10	< 0.45	< 2.2	< 0.11	< 1.9	< 1.0	< 1.1	< 0.19	< 0.11	< 0.43	< 4.1	< 0.092	< 11	< 4.9	< 0.44	< 0.090	< 1.0	< 2.2	< 0.022	< 0.40	< 1.1	< 0.098	< 0.030
PCB-1248	mg/kg		< 0.46	< 0.10	< 0.45	< 2.2	< 0.11	< 1.9	< 1.0	< 1.1	< 0.19	< 0.11	< 0.43	< 4.1	< 0.092	< 11	< 4.9	< 0.44	< 0.090	< 1.0	< 2.2	< 0.022	< 0.40	< 1.1	< 0.098	< 0.030
PCB-1254	mg/kg		< 0.46	< 0.10	< 0.45	< 2.2	< 0.11	< 1.9	< 1.0	< 1.1	< 0.19	< 0.11	< 0.43	< 4.1	< 0.092	< 11	< 4.9	< 0.44	< 0.090	< 1.0	< 2.2	< 0.022	< 0.40	< 1.1	< 0.098	< 0.030
PCB-1260	mg/kg		**4.1**	**0.56**	**3.8**	**22**	**1.3**	**15**	**7.0**	**9.2**	**2.1**	**0.64**	**4.4**	**28**	**1.1**	**62**	**37**	**5.3**	**1.2**	**13**	**18**	**0.17**	**4.5**	**9.7**	**1.3**	**0.10**
Total PCB Aroclors	mg/kg		**4.1**	**0.56**	**3.8**	**22**	**1.3**	**15**	**7.0**	**9.2**	**2.1**	**0.64**	**4.4**	**28**	**1.1**	**62**	**37**	**5.3**	**1.2**	**13**	**18**	**0.17**	**4.5**	**9.7**	**1.3**	**0.10**

		Lab ID	8431573	8431574	8431575	8431576	8431569	8431570	8431571	8431572	8431427	8431428	8431429	8431430	8431700	8431701	8431567	8431568	8431423	8431424	8431425	8431426
		Sample Name	LT11(0.0-0.3)	LT11(0.5-0.8)	LT11(1.0-1.3)	LT11(1.5-1.8)	LT12(0.0-0.3)	LT12(0.5-0.8)	LT12(1.0-1.3)	LT12(1.5-1.8)	LT-13(0.0-0.3)	LT-13(0.5-0.8)	LT-13(1.0-1.3)	LT-13(1.5-1.8)	LT14(0.0-0.3)	LT14(0.5-0.8)	LT14(1.0-1.3)	LT14(1.5-1.8)	LT-15(0.0-0.3)	LT-15(0.5-0.8)	LT-15(1.0-1.3)	LT-15(1.5-1.8)
		Sample Date	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016
		Analysis Date	6/30/2016	6/30/2016	6/30/2016	6/30/2016	6/30/2016	6/30/2016	6/30/2016	6/30/2016	7/1/2016	7/1/2016	7/1/2016	7/1/2016	7/1/2016	7/1/2016	6/30/2016	6/30/2016	7/1/2016	7/1/2016	7/1/2016	7/1/2016
PCB-1016	mg/kg		< 0.19	< 1.1	< 1.0	< 0.46	< 0.20	< 0.41	< 1.0	< 0.021	< 0.38	< 1.2	< 0.10	< 2.0	< 0.099	< 1.0	< 0.020	< 0.021	< 0.39	< 0.50	< 0.44	< 1.1
PCB-1221	mg/kg		< 0.19	< 1.1	< 1.0	< 0.46	< 0.20	< 0.41	< 1.0	< 0.021	< 0.38	< 1.2	< 0.10	< 2.0	< 0.099	< 1.0	< 0.020	< 0.021	< 0.39	< 0.50	< 0.44	< 1.1
PCB-1232	mg/kg		< 0.19	< 1.1	< 1.0	< 0.46	< 0.20	< 0.41	< 1.0	< 0.021	< 0.38	< 1.2	< 0.10	< 2.0	< 0.099	< 1.0	< 0.020	< 0.021	< 0.39	< 0.50	< 0.44	< 1.1
PCB-1242	mg/kg		< 0.19	< 1.1	< 1.0	< 0.46	< 0.20	< 0.41	< 1.0	< 0.021	< 0.38	< 1.2	< 0.10	< 2.0	< 0.099	< 1.0	< 0.020	< 0.021	< 0.39	< 0.50	< 0.44	< 1.1
PCB-1248	mg/kg		< 0.19	< 1.1	< 1.0	< 0.46	< 0.20	< 0.41	< 1.0	< 0.021	< 0.38	< 1.2	< 0.10	< 2.0	< 0.099	< 1.0	< 0.020	< 0.021	< 0.39	< 0.50	< 0.44	< 1.1
PCB-1254	mg/kg		< 0.19	< 1.1	< 1.0	< 0.46	< 0.20	< 0.41	< 1.0	< 0.021	< 0.38	< 1.2	< 0.10	< 2.0	< 0.099	< 1.0	< 0.020	< 0.021	< 0.39	< 0.50	< 0.44	< 1.1
PCB-1260	mg/kg		**2.0**	**8.4**	**8.7**	**5.1**	**2.4**	**4.5**	**8.8**	**0.37**	**1.7**	**7.8**	**1.2**	**22**	**1.5**	**16**	**0.075**	**0.34**	**1.9**	**2.3**	**4.4**	**6.9**
Total PCB Aroclors	mg/kg		**2.0**	**8.4**	**8.7**	**5.1**	**2.4**	**4.5**	**8.8**	**0.37**	**1.7**	**7.8**	**1.2**	**22**	**1.5**	**16**	**0.075**	**0.34**	**1.9**	**2.3**	**4.4**	**6.9**

		Lab ID	8431693	8431696	8431697	8431698	8431699	8431577	8431580	8431581	8431582	8431583	8431416	8431422	8431419	8431420	8431421	8431902	8431903	8431904	8431905	8427959	8427960	8427961	8427962
		Sample Name	LT16(0.0-0.3)	DUP-13	LT16(0.5-0.8)	LT16(1.0-1.3)	LT16(1.5-1.8)	LT17(0.0-0.3)	DUP-11	LT17(0.5-0.8)	LT17(1.0-1.5)	LT17(1.5-1.8)	LT-18(0.0-0.3)	DUP-12	LT-18(0.5-0.8)	LT-18(1.0-1.3)	LT-18(1.5-1.8)	LT-19(0.0-0.3)	LT-19(0.5-0.8)	LT-19(1.0-1.3)	LT-19(1.5-1.8)	LT20(0.0-0.3)	LT20(0.5-0.8)	LT20(1.0-1.3)	LT20(1.5-1.8)
		Sample Date	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/15/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
		Analysis Date	7/3/2016	7/6/2016	7/1/2016	7/1/2016	7/3/2016	6/30/2016	6/30/2016	6/30/2016	6/30/2016	6/30/2016	7/1/2016	7/1/2016	7/1/2016	7/1/2016	7/1/2016	6/28/2016	6/28/2016	6/28/2016	6/28/2016	6/28/2016	6/28/2016	6/28/2016	6/28/2016
PCB-1016	mg/kg		< 0.095	< 0.093	< 4.5	< 0.99	< 0.38	< 0.18	< 0.19	< 0.41	< 2.1	< 0.019	< 0.18	< 0.18	< 0.43	< 0.47	< 0.20	< 0.880	< 3.8	< 3.8	< 0.092	< 1.9	< 0.99	< 0.18	< 0.20
PCB-1221	mg/kg		< 0.095	< 0.093	< 4.5	< 0.99	< 0.38	< 0.18	< 0.19	< 0.41	< 2.1	< 0.019	< 0.18	< 0.18	< 0.43	< 0.47	< 0.20	< 0.880	< 3.8	< 3.8	< 0.092	< 1.9	< 0.99	< 0.18	< 0.20
PCB-1232	mg/kg		< 0.095	< 0.093	< 4.5	< 0.99	< 0.38	< 0.18	< 0.19	< 0.41	< 2.1	< 0.019	< 0.18	< 0.18	< 0.43	< 0.47	< 0.20	< 0.880	< 3.8	< 3.8	< 0.092	< 1.9	< 0.99	< 0.18	< 0.20
PCB-1242	mg/kg		< 0.095	< 0.093	< 4.5	< 0.99	< 0.38	< 0.18	< 0.19	< 0.41	< 2.1	< 0.019	< 0.18	< 0.18	< 0.43	< 0.47	< 0.20	< 0.880	< 3.8	< 3.8	< 0.092	< 1.9	< 0.99	< 0.18	< 0.20
PCB-1248	mg/kg		< 0.095	< 0.093	< 4.5	< 0.99	< 0.38	< 0.18	< 0.19	< 0.41	< 2.1	< 0.019	< 0.18	< 0.18	< 0.43	< 0.47	< 0.20	< 0.880	< 3.8	< 3.8	< 0.092	< 1.9	< 0.99	< 0.18	< 0.20
PCB-1254	mg/kg		< 0.095	< 0.093	< 4.5	< 0.99	< 0.38	< 0.18	< 0.19	< 0.41	< 2.1	< 0.019	< 0.18	< 0.18	< 0.43	< 0.47	< 0.20	< 0.880	< 3.8	< 3.8	< 0.092	< 1.9	< 0.99	< 0.18	< 0.20
PCB-1260	mg/kg		**1.3**	**1.3**	**78**	**15**	**4.4**	**2.2**	**3.2**	**6.5**	**32**	**0.21**	**1.4**	**1.2**	**3.7**	**4.5**	**1.1**	**3.2**	**33**	**24**	**0.89**	**16**	**3.3**	**0.87**	**2.7**
Total PCB Aroclors	mg/kg		**1.3**	**1.3**	**78**	**15**	**4.4**	**2.2**	**3.2**	**6.5**	**32**	**0.21**	**1.4**	**1.2**	**3.7**	**4.5**	**1.1**	**3.2**	**33**	**24**	**0.89**	**16**	**3.3**	**0.87**	**2.7**

mg/kg - milligrams per kilogram
Bold - indicates analyte detected above the method detection limi
ND - Not detected above the method detection limit
< 10 - Not detected above the given method detection limi

Table 1
Amtrak Wilmington Maintenance Facility (DE-0266)
Locomotive Track 1 (OU-4)
PCB Results June 2016
4001 Vandever Avenue
Wilminton, Delaware

	Lab ID	8427972	8427979	8427975	8427976	8427977	8427936	8427966	8427939	8427940	8427941	8427953	8427967	8427956	8427957	8427958	8427932	8427933	8427934	8427935	8427968	8427969	8427970	8427971
Sample Name		LT21(0.0-0.3)	DUP-10	LT21(0.5-0.8)	LT21(1.0-1.3)	LT21(1.5-1.8)	LT22(0.0-0.3)	DUP-9	LT22(0.5-0.8)	LT22(1.0-1.3)	LT22(1.5-1.8)	LT23(0.0-0.3)	DUP-8	LT23(0.5-0.8)	LT23(1.0-1.3)	LT23(1.5-1.8)	LT24(0.0-0.3)	LT24(0.5-0.8)	LT24(1.0-1.3)	LT24(1.5-1.8)	LT25(0.0-0.3)	LT25(0.5-0.8)	LT25(1.0-1.3)	LT25(1.5-1.8)
Sample Date		6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/13/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
Analysis Date		6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/22/2016	6/28/2016	6/22/2016	6/22/2016	6/22/2016	6/27/2016	6/28/2016	6/27/2016	6/27/2016	6/27/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016
PCB-1016	mg/kg	< 0.87	< 0.87	< 1.9	< 0.019	< 0.019	< 0.88	< 1.0	< 3.6	< 4.0	< 0.38	< 0.90	< 1.8	< 1.8	< 20	< 2.3	< 39	< 4.2	< 10	< 9.6	< 21	< 2.1	< 0.097	< 0.19
PCB-1221	mg/kg	< 0.87	< 0.87	< 1.9	< 0.019	< 0.019	< 0.88	< 1.0	< 3.6	< 4.0	< 0.38	< 0.90	< 1.8	< 1.8	< 20	< 2.3	< 39	< 4.2	< 10	< 9.6	< 21	< 2.1	< 0.097	< 0.19
PCB-1232	mg/kg	< 0.87	< 0.87	< 1.9	< 0.019	< 0.019	< 0.88	< 1.0	< 3.6	< 4.0	< 0.38	< 0.90	< 1.8	< 1.8	< 20	< 2.3	< 39	< 4.2	< 10	< 9.6	< 21	< 2.1	< 0.097	< 0.19
PCB-1242	mg/kg	< 0.87	< 0.87	< 1.9	< 0.019	< 0.019	< 0.88	< 1.0	< 3.6	< 4.0	< 0.38	< 0.90	< 1.8	< 1.8	< 20	< 2.3	< 39	< 4.2	< 10	< 9.6	< 21	< 2.1	< 0.097	< 0.19
PCB-1248	mg/kg	< 0.87	< 0.87	< 1.9	< 0.019	< 0.019	< 0.88	< 1.0	< 3.6	< 4.0	< 0.38	< 0.90	< 1.8	< 1.8	< 20	< 2.3	< 39	< 4.2	< 10	< 9.6	< 21	< 2.1	< 0.097	< 0.19
PCB-1254	mg/kg	< 0.87	< 0.87	< 1.9	< 0.019	< 0.019	< 0.88	< 1.0	< 3.6	< 4.0	< 0.38	< 0.90	< 1.8	< 1.8	< 20	< 2.3	**120**	< 4.2	**46**	**17**	**180**	< 2.1	**1.1**	< 0.19
PCB-1260	mg/kg	**8.0**	**10**	**26**	**0.041**	**0.032**	**1.4**	**6.2**	**10**	**11**	**0.95**	**3.5**	**6.2**	**12**	**62**	**9.9**	< 39	**16**	< 10	< 9.6	**68**	**20**	**0.52**	**1.4**
Total PCB Aroclors	mg/kg	**8**	**10**	**26**	**0.041**	**0.032**	**1.4**	**6.2**	**10**	**11**	**0.95**	**3.5**	**6.2**	**12**	**62**	**9.9**	**120**	**16**	**46**	**17**	**248**	**20**	**1.62**	**1.4**

	Lab ID	8427928	8427929	8427930	8427931	8427916	8427919	8427920	8427921	8427952	8427892	8427898	8427895	8427896	8427897	8427984	8427985	8427986	8427987	8427912	8427913	8427914	8427915
Sample Name		LT26(0.0-0.3)	LT26(0.5-0.8)	LT26(1.0-1.3)	LT26(1.5-1.8)	LT27(0.0-0.3)	DUP-7	LT27(0.5-0.8)	LT27(1.0-1.3)	LT27(1.5-1.8)	LT28(0.0-0.3)	DUP-6	LT28(0.5-0.8)	LT28(1.0-1.3)	LT28(1.5-1.8)	LT29(0.0-0.3)	LT29(0.5-0.8)	LT29(1.0-1.3)	LT29(1.5-1.8)	LT30(0.0-0.3)	LT30(0.5-0.8)	LT30(1.0-1.3)	LT30(1.5-1.8)
Sample Date		6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/25016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
Analysis Date		6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/27/2016	6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/21/2016	6/22/2016	6/22/2016	6/22/2016
PCB-1016	mg/kg	< 3.7	< 2.0	< 0.20	< 0.41	< 3.8	< 4.0	< 2.1	< 0.45	< 2.0	< 3.8	< 3.7	< 4.2	< 1.0	< 1.1	< 1.0	< 1.1	< 2.2	< 0.19	< 2.2	< 2.0	< 2.1	< 0.019
PCB-1221	mg/kg	< 3.7	< 2.0	< 0.20	< 0.41	< 3.8	< 4.0	< 2.1	< 0.45	< 2.0	< 3.8	< 3.7	< 4.2	< 1.0	< 1.1	< 1.0	< 1.1	< 2.2	< 0.19	< 2.2	< 2.0	< 2.1	< 0.019
PCB-1232	mg/kg	< 3.7	< 2.0	< 0.20	< 0.41	< 3.8	< 4.0	< 2.1	< 0.45	< 2.0	< 3.8	< 3.7	< 4.2	< 1.0	< 1.1	< 1.0	< 1.1	< 2.2	< 0.19	< 2.2	< 2.0	< 2.1	< 0.019
PCB-1242	mg/kg	< 3.7	< 2.0	< 0.20	< 0.41	< 3.8	< 4.0	< 2.1	< 0.45	< 2.0	< 3.8	< 3.7	< 4.2	< 1.0	< 1.1	< 1.0	< 1.1	< 2.2	< 0.19	< 2.2	< 2.0	< 2.1	< 0.019
PCB-1248	mg/kg	< 3.7	< 2.0	< 0.20	< 0.41	< 3.8	< 4.0	< 2.1	< 0.45	< 2.0	< 3.8	< 3.7	< 4.2	< 1.0	< 1.1	< 1.0	< 1.1	< 2.2	< 0.19	< 2.2	< 2.0	< 2.1	< 0.019
PCB-1254	mg/kg	< 3.7	< 2.0	< 0.20	< 0.41	< 3.8	< 4.0	< 2.1	< 0.45	< 2.0	< 3.8	< 3.7	< 4.2	< 1.0	< 1.1	< 1.0	< 1.1	< 2.2	< 0.19	< 2.2	< 2.0	< 2.1	< 0.019
PCB-1260	mg/kg	**46**	**19**	**2.6**	**3.1**	**26**	**33**	**13**	**3.4**	**7.7**	**32**	**31**	**41**	**17**	**12**	**14**	**14**	**20**	**1.3**	**17**	**20**	**15**	**0.22**
Total PCB Aroclors	mg/kg	**46**	**19**	**2.6**	**3.1**	**26**	**33**	**13**	**3.4**	**7.7**	**32**	**31**	**41**	**17**	**12**	**14**	**14**	**20**	**1.3**	**17**	**20**	**15**	**0.22**

	Lab ID	8427980	8427981	8427982	8427983	8427901	8427963	8427964	8427965	8427924	8427925	8427926	8427927	8427910	8427911	8427899	8427900	8427950	8427951	8427922	8427923	8427946	8427947	8427948	8427949
Sample Name		LT31(0.0-0.3)	LT31(0.5-0.8)	LT31(1.0-1.3)	LT31(1.5-1.8)	LT32(0.0-0.3)	LT32(0.5-0.8)	LT32(1.0-1.3)	LT32(1.5-1.8)	LT33(0.0-0.3)	LT33(0.5-0.8)	LT33(1.0-1.3)	LT33(1.5-1.8)	LT34(0.0-0.3)	LT34(0.5-0.8)	LT34(1.0-1.3)	LT34(1.5-1.8)	LT35(0.0-0.3)	LT35(0.5-0.8)	LT35(1.0-1.3)	LT35(1.5-1.8)	LT36(0.0-0.3)	LT36(0.5-0.8)	LT36(1.0-1.3)	LT36(1.5-1.8)
Sample Date		6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/20169	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
Analysis Date		6/29/2016	6/29/2016	6/30/2016	6/29/2016	6/21/2016	6/28/2016	6/28/2016	6/28/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016
PCB-1016	mg/kg	< 2.4	< 2.0	< 0.11	< 0.018	< 1.9	< 3.9	< 4.6	< 1.0	< 1.9	< 2.0	< 1.8	< 2.0	< 2.4	< 2.0	< 1.1	< 0.20	< 2.0	< 2.0	< 1.1	< 2.1	< 2.0	< 2.0	< 4.1	< 2.2
PCB-1221	mg/kg	< 2.4	< 2.0	< 0.11	< 0.018	< 1.9	< 3.9	< 4.6	< 1.0	< 1.9	< 2.0	< 1.8	< 2.0	< 2.4	< 2.0	< 1.1	< 0.20	< 2.0	< 2.0	< 1.1	< 2.1	< 2.0	< 2.0	< 4.1	< 2.2
PCB-1232	mg/kg	< 2.4	< 2.0	< 0.11	< 0.018	< 1.9	< 3.9	< 4.6	< 1.0	< 1.9	< 2.0	< 1.8	< 2.0	< 2.4	< 2.0	< 1.1	< 0.20	< 2.0	< 2.0	< 1.1	< 2.1	< 2.0	< 2.0	< 4.1	< 2.2
PCB-1242	mg/kg	< 2.4	< 2.0	< 0.11	< 0.018	< 1.9	< 3.9	< 4.6	< 1.0	< 1.9	< 2.0	< 1.8	< 2.0	< 2.4	< 2.0	< 1.1	< 0.20	< 2.0	< 2.0	< 1.1	< 2.1	< 2.0	< 2.0	< 4.1	< 2.2
PCB-1248	mg/kg	< 2.4	< 2.0	< 0.11	< 0.018	< 1.9	< 3.9	< 4.6	< 1.0	< 1.9	< 2.0	< 1.8	< 2.0	< 2.4	< 2.0	< 1.1	< 0.20	< 2.0	< 2.0	< 1.1	< 2.1	< 2.0	< 2.0	< 4.1	< 2.2
PCB-1254	mg/kg	< 2.4	< 2.0	< 0.11	< 0.018	< 1.9	< 3.9	< 4.6	< 1.0	< 1.9	< 2.0	< 1.8	< 2.0	< 2.4	< 2.0	< 1.1	< 0.20	< 2.0	< 2.0	< 1.1	< 2.1	< 2.0	< 2.0	< 4.1	< 2.2
PCB-1260	mg/kg	**16**	**20**	**0.84**	**0.058**	**21**	**18**	**39**	**7.3**	**12**	**23**	**18**	**17**	**26**	**22**	**10**	**1.9**	**6.8**	**12**	**8.4**	**13**	**6.2**	**8.1**	**13**	**7.7**
Total PCB Aroclors	mg/kg	**16**	**20**	**0.84**	**0.058**	**21**	**18**	**39**	**7.3**	**12**	**23**	**18**	**17**	**26**	**22**	**10**	**1.9**	**6.8**	**12**	**8.4**	**13**	**6.2**	**8.1**	**13**	**7.7**

	Lab ID	8427906	8427907	8427908	8427909	8427902	8427903	8427904	8427905	8427942	8427943	8427944	8427945	8425643	8425646	8425640	8425641	8425642	8425584	8425585	8425586	8425587
Sample Name		LT37(0.0-0.3)	LT37(0.5-0.8)	LT37(1.0-1.3)	LT37(1.5-1.8)	LT38(0.0-0.3)	LT38(0.5-0.8)	LT38(1.0-1.3)	LT38(1.5-1.8)	LT39(0.0-0.3)	LT39(0.5-0.8)	LT39(1.0-1.3)	LT39(1.5-1.8)	LT-40(0.0-0.3)	DUP-5	LT-40(0.5-0.8)	LT-40(1.0-1.3)	LT-40(1.5-1.8)	LT-41(0.0-0.3)	LT-41(0.5-0.8)	LT-41(1.0-1.3)	LT-41(1.5-1.8)
Sample Date		6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016
Analysis Date		6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/19/2016	6/19/2016	6/20/2016	6/20/2016	6/20/2016	6/17/2016	6/17/2016	6/17/2016	6/17/2016
PCB-1016	mg/kg	< 2.1	< 2.0	< 4.4	< 0.44	< 0.98	< 2.0	< 2.4	< 1.1	< 4.1	< 4.2	< 2.3	< 4.7	< 4.4	< 4.1	< 2.0	< 2.1	< 1.1	< 2.1	< 3.9	< 2.1	< 0.210
PCB-1221	mg/kg	< 2.1	< 2.0	< 4.4	< 0.44	< 0.98	< 2.0	< 2.4	< 1.1	< 4.1	< 4.2	< 2.3	< 4.7	< 4.4	< 4.1	< 2.0	< 2.1	< 1.1	< 2.1	< 3.9	< 2.1	< 0.210
PCB-1232	mg/kg	< 2.1	< 2.0	< 4.4	< 0.44	< 0.98	< 2.0	< 2.4	< 1.1	< 4.1	< 4.2	< 2.3	< 4.7	< 4.4	< 4.1	< 2.0	< 2.1	< 1.1	< 2.1	< 3.9	< 2.1	< 0.210
PCB-1242	mg/kg	< 2.1	< 2.0	< 4.4	< 0.44	< 0.98	< 2.0	< 2.4	< 1.1	< 4.1	< 4.2	< 2.3	< 4.7	< 4.4	< 4.1	< 2.0	< 2.1	< 1.1	< 2.1	< 3.9	< 2.1	< 0.210
PCB-1248	mg/kg	< 2.1	< 2.0	< 4.4	< 0.44	< 0.98	< 2.0	< 2.4	< 1.1	< 4.1	< 4.2	< 2.3	< 4.7	< 4.4	< 4.1	< 2.0	< 2.1	< 1.1	< 2.1	< 3.9	< 2.1	< 0.210
PCB-1254	mg/kg	< 2.1	< 2.0	< 4.4	< 0.44	< 0.98	< 2.0	< 2.4	< 1.1	< 4.1	< 4.2	< 2.3	< 4.7	< 4.4	< 4.1	< 2.0	< 2.1	< 1.1	< 2.1	< 3.9	< 2.1	< 0.210
PCB-1260	mg/kg	**17**	**25**	**46**	**6.5**	**15**	**32**	**34**	**16**	**11**	**18**	**12**	**5.9**	**21**	**34**	**13**	**14**	**5.7**	**17**	**27**	**13**	**0.83**
Total PCB Aroclors	mg/kg	**17**	**25**	**46**	**6.5**	**15**	**32**	**34**	**16**	**11**	**18**	**12**	**5.9**	**21**	**34**	**13**	**14**	**5.7**	**17**	**27**	**13**	**0.83**

mg/kg - milligrams per kilogram
Bold - indicates analyte detected above the method detection limi
ND - Not detected above the method detection limit
< 10 - Not detected above the given method detection limi

Table 1
Amtrak Wilmington Maintenance Facility (DE-0266)
Locomotive Track 1 (OU-4)
PCB Results June 2016
4001 Vandever Avenue
Wilminton, Delaware

Lab ID		8425724	8425725	8425726	8425727	8425660	8425661	8425662	8425663	8425720	8425721	8425722	8425723	8425633	8425636	8425637	8425638	8425639	8425656	8425657	8425658	8425659
Sample Name		LT-42(0.0-0.3)	LT-42(0.5-0.8)	LT-42(1.0-1.3)	LT-42(1.5-1.8)	LT-43(0.0-0.3)	LT-43(0.5-0.8)	LT-43(1.0-1.3)	LT-43(1.5-1.8)	LT-44(0.0-0.3)	LT-44(0.5-0.8)	LT-44(1.0-1.3)	LT-44(1.5-1.8)	LT-45(0.0-0.3)	DUP-4	LT-45(0.5-0.8)	LT-45(1.0-1.3)	LT-45(1.5-1.8)	LT-46(0.0-0.3)	LT-46(0.5-0.8)	LT-46(1.0-1.3)	LT-46(1.5-1.8)
Sample Date		6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016
Analysis Date		6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/21/2016	6/20/2016
PCB-1016	mg/kg	< 2.1	< 2.1	< 2.3	< 1.4	< 3.9	< 2.2	< 0.20	< 1.1	< 1.9	< 1.9	< 0.21	< 0.43	< 9.5	< 3.8	< 1.1	< 0.20	< 4.0	< 1.8	< 0.39	< 0.022	< 0.23
PCB-1221	mg/kg	< 2.1	< 2.1	< 2.3	< 1.4	< 3.9	< 2.2	< 0.20	< 1.1	< 1.9	< 1.9	< 0.21	< 0.43	< 9.5	< 3.8	< 1.1	< 0.20	< 4.0	< 1.8	< 0.39	< 0.022	< 0.23
PCB-1232	mg/kg	< 2.1	< 2.1	< 2.3	< 1.4	< 3.9	< 2.2	< 0.20	< 1.1	< 1.9	< 1.9	< 0.21	< 0.43	< 9.5	< 3.8	< 1.1	< 0.20	< 4.0	< 1.8	< 0.39	< 0.022	< 0.23
PCB-1242	mg/kg	< 2.1	< 2.1	< 2.3	< 1.4	< 3.9	< 2.2	< 0.20	< 1.1	< 1.9	< 1.9	< 0.21	< 0.43	< 9.5	< 3.8	< 1.1	< 0.20	< 4.0	< 1.8	< 0.39	< 0.022	< 0.23
PCB-1248	mg/kg	< 2.1	< 2.1	< 2.3	< 1.4	< 3.9	< 2.2	< 0.20	< 1.1	< 1.9	< 1.9	< 0.21	< 0.43	< 9.5	< 3.8	< 1.1	< 0.20	< 4.0	< 1.8	< 0.39	< 0.022	< 0.23
PCB-1254	mg/kg	< 2.1	< 2.1	< 2.3	< 1.4	< 3.9	< 2.2	< 0.20	< 1.1	< 1.9	< 1.9	< 0.21	< 0.43	< 9.5	< 3.8	< 1.1	< 0.20	< 4.0	< 1.8	< 0.39	< 0.022	< 0.23
PCB-1260	mg/kg	**25**	**19**	**21**	**5.3**	**21**	**14**	**0.42**	**4.5**	**19**	**29**	**1.8**	**3.8**	**33**	**25**	**3.5**	**1.3**	**21**	**11**	**2.2**	**0.076**	**0.35**
Total PCB Aroclors	mg/kg	**25**	**19**	**21**	**5.3**	**21**	**14**	**0.42**	**4.5**	**19**	**29**	**1.8**	**3.8**	**33**	**25**	**3.5**	**1.3**	**21**	**11**	**2.2**	**0.076**	**0.35**

Lab ID		8425716	8425717	8425718	8425719	8425629	8425630	8425631	8425632	8425712	8425713	8425714	8425715	8425652	8425653	8425654	8425655	8425625	8425626	8425627	8425628	8425708	8425709	8425710	8425711
Sample Name		LT-47(0.0-0.3)	LT-47(0.5-0.8)	LT-47(1.0-1.3)	LT-47(1.5-1.8)	LT-48(0.0-0.3)	LT-48(0.5-0.8)	LT-48(1.0-1.3)	LT-48(1.5-1.8)	LT-49(0.0-0.3)	LT-49(0.5-0.8)	LT-49(1.0-1.3)	LT-49(1.5-1.8)	LT-50(0.0-0.3)	LT-50(0.5-0.8)	LT-50(1.0-1.3)	LT-50(1.5-1.8)	LT-51(0.0-0.3)	LT-51(0.5-0.8)	LT-51(1.0-1.3)	LT-51(1.5-1.8)	LT-52(0.0-0.3)	LT-52(0.5-0.8)	LT-52(1.0-1.3)	LT-52(1.5-1.8)
Sample Date		6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016
Analysis Date		6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/21/2016	6/21/2016	6/21/2016	6/21/2016
PCB-1016	mg/kg	< 1.9	< 1.9	< 1.0	< 0.025	< 3.8	< 2.0	< 2.0	< 0.23	< 1.8	< 0.43	< 0.20	< 0.11	< 3.8	< 1.0	< 0.20	< 0.22	< 1.8	< 0.47	< 0.42	< 1.1	< 1.9	< 1.0	< 0.39	< 1.9
PCB-1221	mg/kg	< 1.9	< 1.9	< 1.0	< 0.025	< 3.8	< 2.0	< 2.0	< 0.23	< 1.8	< 0.43	< 0.20	< 0.11	< 3.8	< 1.0	< 0.20	< 0.22	< 1.8	< 0.47	< 0.42	< 1.1	< 1.9	< 1.0	< 0.39	< 1.9
PCB-1232	mg/kg	< 1.9	< 1.9	< 1.0	< 0.025	< 3.8	< 2.0	< 2.0	< 0.23	< 1.8	< 0.43	< 0.20	< 0.11	< 3.8	< 1.0	< 0.20	< 0.22	< 1.8	< 0.47	< 0.42	< 1.1	< 1.9	< 1.0	< 0.39	< 1.9
PCB-1242	mg/kg	< 1.9	< 1.9	< 1.0	< 0.025	< 3.8	< 2.0	< 2.0	< 0.23	< 1.8	< 0.43	< 0.20	< 0.11	< 3.8	< 1.0	< 0.20	< 0.22	< 1.8	< 0.47	< 0.42	< 1.1	< 1.9	< 1.0	< 0.39	< 1.9
PCB-1248	mg/kg	< 1.9	< 1.9	< 1.0	< 0.025	< 3.8	< 2.0	< 2.0	< 0.23	< 1.8	< 0.43	< 0.20	< 0.11	< 3.8	< 1.0	< 0.20	< 0.22	< 1.8	< 0.47	< 0.42	< 1.1	< 1.9	< 1.0	< 0.39	< 1.9
PCB-1254	mg/kg	< 1.9	< 1.9	< 1.0	< 0.025	< 3.8	< 2.0	< 2.0	< 0.23	< 1.8	< 0.43	< 0.20	< 0.11	< 3.8	< 1.0	< 0.20	< 0.22	< 1.8	< 0.47	< 0.42	< 1.1	< 1.9	< 1.0	< 0.39	< 1.9
PCB-1260	mg/kg	**25**	**7.5**	**5.5**	**0.088**	**26**	**9.7**	**8.5**	**1.7**	**12**	**3.9**	**2.7**	**0.78**	**26**	**5.0**	**1.7**	**1.5**	**12**	**3.5**	**2.8**	**5.2**	**24**	**8.2**	**4.3**	**12**
Total PCB Aroclors	mg/kg	**25**	**7.5**	**5.5**	**0.088**	**26**	**9.7**	**8.5**	**1.7**	**12**	**3.9**	**2.7**	**0.78**	**26**	**5.0**	**1.7**	**1.5**	**12**	**3.5**	**2.8**	**5.2**	**24**	**8.2**	**4.3**	**12**

Lab ID		8425621	8425622	8425623	8425624	8425648	8425649	8425650	8425651	8425614	8425617	8425618	8425619	8425620	8425694	8425695	8425696	8425697	8425673	8425674	8425675	8425676
Sample Name		LT-53(0.0-0.3)	LT-53(0.5-0.8)	LT-53(1.0-1.3)	LT-53(1.5-1.8)	LT-54(0.0-0.3)	LT-54(0.5-0.8)	LT-54(1.0-1.3)	LT-54(1.5-1.8)	LT-55(0.0-0.3)	DUP-3	LT-55(0.5-0.8)	LT-55(1.0-1.3)	LT-55(1.5-1.8)	LT-56(0.0-0.3)	lt-56(0.5-0.8)	lt-56(1.0-1.3)	lt-56(1.5-1.8)	LT-57(0.0-0.3)	LT-57(0.5-0.8)	LT-57(1.0-1.3)	LT-57(1.5-1.8)
Sample Date		6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016
Analysis Date		6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/19/2016	6/19/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/18/2016	6/18/2016	6/18/2016	6/18/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016
PCB-1016	mg/kg	< 9.7	< 4.0	< 2.0	< 0.23	< 4.1	< 4.1	< 0.22	< 0.094	< 3.9	< 3.9	< 2.0	< 2.1	< 1.9	<2.0	<0.400	<0.410	<0.094	< 1.9	< 2.0	< 0.22	< 0.094
PCB-1221	mg/kg	< 9.7	< 4.0	< 2.0	< 0.23	< 4.1	< 4.1	< 0.22	< 0.094	< 3.9	< 3.9	< 2.0	< 2.1	< 1.9	<2.0	<0.400	<0.410	<0.094	< 1.9	< 2.0	< 0.22	< 0.094
PCB-1232	mg/kg	< 9.7	< 4.0	< 2.0	< 0.23	< 4.1	< 4.1	< 0.22	< 0.094	< 3.9	< 3.9	< 2.0	< 2.1	< 1.9	<2.0	<0.400	<0.410	<0.094	< 1.9	< 2.0	< 0.22	< 0.094
PCB-1242	mg/kg	< 9.7	< 4.0	< 2.0	< 0.23	< 4.1	< 4.1	< 0.22	< 0.094	< 3.9	< 3.9	< 2.0	< 2.1	< 1.9	<2.0	<0.400	<0.410	<0.094	< 1.9	< 2.0	< 0.22	< 0.094
PCB-1248	mg/kg	< 9.7	< 4.0	< 2.0	< 0.23	< 4.1	< 4.1	< 0.22	< 0.094	< 3.9	< 3.9	< 2.0	< 2.1	< 1.9	<2.0	<0.400	<0.410	<0.094	< 1.9	< 2.0	< 0.22	< 0.094
PCB-1254	mg/kg	< 9.7	< 4.0	< 2.0	< 0.23	< 4.1	< 4.1	< 0.22	< 0.094	< 3.9	< 3.9	< 2.0	< 2.1	< 1.9	<2.0	<0.400	<0.410	<0.094	< 1.9	< 2.0	< 0.22	< 0.094
PCB-1260	mg/kg	**27**	**13**	**8.6**	**1.4**	**28**	**14**	**0.79**	**0.68**	**36**	**26**	**8.6**	**10**	**6.8**	**11**	**5.1**	**4.7**	**1.1**	**11**	**8.4**	**1.3**	**0.15**
Total PCB Aroclors	mg/kg	**27**	**13**	**8.6**	**1.4**	**28**	**14**	**0.79**	**0.68**	**36**	**26**	**8.6**	**10**	**6.8**	**11**	**5.1**	**4.7**	**1.1**	**11**	**8.4**	**1.3**	**0.15**

mg/kg - milligrams per kilogram
Bold - indicates analyte detected above the method detection limi
ND - Not detected above the method detection limit
< 10 - Not detected above the given method detection limi

Table 1
Amtrak Wilmington Maintenance Facility (DE-0266)
Locomotive Track 1 (OU-4)
PCB Results June 2016
4001 Vandever Avenue
Wilminton, Delaware

Lab ID		8425600	8425601	8425602	8425603	8425690	8425691	8425692	8425693	8425667	8425670	8425671	8425672	8425647	8425596	8425597	8425598	8425599	8425686	8425687	8425688	8425689
Sample Name		LT-58(0.0-0.3)	LT-58(0.5-0.8)	LT-58(1.0-1.3)	LT-58(1.5-1.8)	LT-59(0.0-0.3)	LT-59(0.5-0.8)	LT-59(1.0-1.3)	LT-59(1.5-1.8)	LT-60(0.0-0.3)	DUP-2	LT-60(0.5-0.8)	LT-60(1.0-1.3)	LT-60(1.5-1.8)	LT-61(0.0-0.3)	LT-61(0.5-0.8)	LT-61(1.0-1.3)	LT-61(1.5-1.8)	LT-62(0.0-0.3)	LT-62(0.5-0.8)	LT-62(1.0-1.3)	LT-62(1.5-1.8)
Sample Date		6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/216	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016
Analysis Date		6/17/2016	6/17/2016	6/17/2016	6/17/2016	6/18/2016	6/18/2016	6/18/2016	6/18/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/23/2016	6/17/2016	6/17/2016	6/17/2016	6/17/2016	6/18/2016	6/18/2016	6/18/2016	6/18/2016
PCB-1016	mg/kg	< 1.8	< 2.1	< 1.1	< 0.46	<3.9	<1.9	<0.230	<1.1	< 2.0	< 2.0	< 1.1	< 0.45	< 0.020	< 3.9	< 4.2	< 4.0	< 0.21	<4.1	<4.0	<2.2	<2.0
PCB-1221	mg/kg	< 1.8	< 2.1	< 1.1	< 0.46	<3.9	<1.9	<0.230	<1.1	< 2.0	< 2.0	< 1.1	< 0.45	< 0.020	< 3.9	< 4.2	< 4.0	< 0.21	<4.1	<4.0	<2.2	<2.0
PCB-1232	mg/kg	< 1.8	< 2.1	< 1.1	< 0.46	<3.9	<1.9	<0.230	<1.1	< 2.0	< 2.0	< 1.1	< 0.45	< 0.020	< 3.9	< 4.2	< 4.0	< 0.21	<4.1	<4.0	<2.2	<2.0
PCB-1242	mg/kg	< 1.8	< 2.1	< 1.1	< 0.46	<3.9	<1.9	<0.230	<1.1	< 2.0	< 2.0	< 1.1	< 0.45	< 0.020	< 3.9	< 4.2	< 4.0	< 0.21	<4.1	<4.0	<2.2	<2.0
PCB-1248	mg/kg	< 1.8	< 2.1	< 1.1	< 0.46	<3.9	<1.9	<0.230	<1.1	< 2.0	< 2.0	< 1.1	< 0.45	< 0.020	< 3.9	< 4.2	< 4.0	< 0.21	<4.1	<4.0	<2.2	<2.0
PCB-1254	mg/kg	< 1.8	< 2.1	< 1.1	< 0.46	<3.9	<1.9	<0.230	<1.1	< 2.0	< 2.0	< 1.1	< 0.45	< 0.020	< 3.9	< 4.2	< 4.0	< 0.21	<4.1	<4.0	<2.2	<2.0
PCB-1260	mg/kg	**6.0**	**5.6**	**5.1**	**2.6**	**26**	**16**	**1.8**	**7.7**	**16**	**12**	**3.9**	**2.6**	**0.16**	**16**	**18**	**15**	**1.2**	**21**	**31**	**12**	**13**
Total PCB Aroclors	mg/kg	**6.0**	**5.6**	**5.1**	**2.6**	**26**	**16**	**1.8**	**7.7**	**16**	**12**	**3.9**	**2.6**	**0.16**	**16**	**18**	**15**	**1.2**	**21**	**31**	**12**	**13**

Lab ID		8425707	8425664	8425665	8425666	8425612	8425613	8425594	8425595	8425682	8425683	8425684	8425685	8425700	8425703	8425704	8425705	8425706	8425608	8425609	8425610	8425611
Sample Name		LT-63(0.0-0.3)	LT-63(0.5-0.8)	LT-63(1.0-1.3)	LT-63(1.5-1.8)	LT-64(0.0-0.3)	LT-64(0.5-0.8)	LT-64(1.0-1.3)	LT-64(1.5-1.8)	LT-65(0.0-0.3)	LT-65(0.5-0.8)	LT-65(10.-1.3)	LT-65(1.5-1.8)	LT-66(0.0-0.3)	LT-66 DUP-1	LT-66(0.5-0.8)	LT-66(1.0-1.3)	LT-66(1.5-1.8)	LT-67(0.0-0.3)	LT-67(0.5-0.8)	LT-67(1.0-1.3)	LT-67(1.5-1.8)
Sample Date		6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016
Analysis Date		6/21/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/17/2016	6/17/2016	6/17/2016	6/17/2016	6/17/2016	6/17/2016	6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/21/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016
PCB-1016	mg/kg	< 2.0	< 2.1	< 0.20	< 0.10	< 4.2	< 4.1	< 4.4	< 4.2	<11	<4.2	<0.440	<0.099	< 4.1	< 4.1	< 2.1	< 0.10	< 0.20	< 11	< 2.2	< 2.1	< 0.43
PCB-1221	mg/kg	< 2.0	< 2.1	< 0.20	< 0.10	< 4.2	< 4.1	< 4.4	< 4.2	<11	<4.2	<0.440	<0.099	< 4.1	< 4.1	< 2.1	< 0.10	< 0.20	< 11	< 2.2	< 2.1	< 0.43
PCB-1232	mg/kg	< 2.0	< 2.1	< 0.20	< 0.10	< 4.2	< 4.1	< 4.4	< 4.2	<11	<4.2	<0.440	<0.099	< 4.1	< 4.1	< 2.1	< 0.10	< 0.20	< 11	< 2.2	< 2.1	< 0.43
PCB-1242	mg/kg	< 2.0	< 2.1	< 0.20	< 0.10	< 4.2	< 4.1	< 4.4	< 4.2	<11	<4.2	<0.440	<0.099	< 4.1	< 4.1	< 2.1	< 0.10	< 0.20	< 11	< 2.2	< 2.1	< 0.43
PCB-1248	mg/kg	< 2.0	< 2.1	< 0.20	< 0.10	< 4.2	< 4.1	< 4.4	< 4.2	<11	<4.2	<0.440	<0.099	< 4.1	< 4.1	< 2.1	< 0.10	< 0.20	< 11	< 2.2	< 2.1	< 0.43
PCB-1254	mg/kg	< 2.0	< 2.1	< 0.20	< 0.10	< 4.2	< 4.1	< 4.4	< 4.2	<11	<4.2	<0.440	<0.099	< 4.1	< 4.1	< 2.1	< 0.10	< 0.20	< 11	< 2.2	< 2.1	< 0.43
PCB-1260	mg/kg	**22**	**12**	**0.93**	**0.14**	**36**	**23**	**17**	**8.0**	**55**	**23**	**4.0**	**0.6**	**41**	**42**	**11**	**0.90**	**1.8**	**51**	**11**	**5.3**	**4.0**
Total PCB Aroclors	mg/kg	**22**	**12**	**0.93**	**0.14**	**36**	**23**	**17**	**8.0**	**55**	**23**	**4.0**	**0.6**	**41**	**42**	**11**	**0.90**	**1.8**	**51**	**11**	**5.3**	**4.0**

Lab ID		8425678	8425679	8425680	8425681	8425604	8425605	8425606	8425607	8425589	8425592	8425698	8425699	8425588	8425590	8425591	8425593
Sample Name		LT-68(0.0-0.3)	LT-68(0.5-0.8)	LT-68(1.0-1.3)	LT-68(1.5-1.8)	LT-69(0.0-0.3)	LT-69(0.5-0.8)	LT-69(1.0-1.3)	LT-69(1.5-1.8)	LT-70(0.0-0.3)	LT-70(0.5-0.8)	LT-70(1.0-1.3)	LT-70(1.5-1.8)	LT-71(0.0-0.3)	LT-71(0.5-0.8)	LT-71(1.0-1.3)	LT-71(1.5-1.8)
Sample Date		6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016	6/13/2016
Analysis Date		6/17/2016	6/17/2016	6/17/2016	6/17/2016	6/20/2016	6/20/2016	6/20/2016	6/20/2016	6/17/2016	6/17/2016	6/20/2016	6/20/2016	6/17/2016	6/17/2016	6/17/2016	6/17/2016
PCB-1016	mg/kg	<11	<10	<0.49	<0.210	< 9.5	< 11	< 4.2	< 0.42	< 11	< 4.2	< 2.2	< 2.3	< 11	< 4.5	< 1.2	< 0.22
PCB-1221	mg/kg	<11	<10	<0.49	<0.210	< 9.5	< 11	< 4.2	< 0.42	< 11	< 4.2	< 2.2	< 2.3	< 11	< 4.5	< 1.2	< 0.22
PCB-1232	mg/kg	<11	<10	<0.49	<0.210	< 9.5	< 11	< 4.2	< 0.42	< 11	< 4.2	< 2.2	< 2.3	< 11	< 4.5	< 1.2	< 0.22
PCB-1242	mg/kg	<11	<10	<0.49	<0.210	< 9.5	< 11	< 4.2	< 0.42	< 11	< 4.2	< 2.2	< 2.3	< 11	< 4.5	< 1.2	< 0.22
PCB-1248	mg/kg	<11	<10	<0.49	<0.210	< 9.5	< 11	< 4.2	< 0.42	< 11	< 4.2	< 2.2	< 2.3	< 11	< 4.5	< 1.2	< 0.22
PCB-1254	mg/kg	<11	<10	<0.49	<0.210	< 9.5	< 11	< 4.2	< 0.42	< 11	< 4.2	< 2.2	< 2.3	< 11	< 4.5	< 1.2	< 0.22
PCB-1260	mg/kg	**32**	**47**	**2.7**	**2.7**	**34**	**53**	**26**	**4.0**	**24**	**25**	**17**	**19**	**81**	**12**	**3.2**	**1.1**
Total PCB Aroclors	mg/kg	**32**	**47**	**2.7**	**2.7**	**34**	**53**	**26**	**4.0**	**24**	**25**	**17**	**19**	**81**	**12**	**3.2**	**1.1**

mg/kg - milligrams per kilogram
Bold - indicates analyte detected above the method detection limi
ND - Not detected above the method detection limit
< 10 - Not detected above the given method detection limit

Appendix A – Supplemental Focused Feasibility Study Report dated March 28, 2014

Appendix B – Revised RI/FFS Work Plan Amtrak Wilmington Maintenance Facility (DE-0170) prepared by Stantec and dated April 2012 and Addendum dated June 6, 2012

Appendix C – Interim Data Submittal Remedial Investigation Amtrak Wilmington Maintenance Facility (DE-0170) prepared by Stantec and dated March 2015 (On CD)

Appendix D – Self Implementing Certification

Certification

All sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site, are on file at the location designated in the certificate, and are available for EPA inspection.

Files are located at the following location:

Environmental Coordinator
Amtrak Wilmington Shops
4001Vandever Avenue
Wilmington, DE

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Signature and printed name of owner of property — Date: 8/17/16
George Dutton Sr., Manager, Mechanical Operations

Signature and printed name of party authoring cleanup plan — Date: 8/24/2016
Frank Aceto, Vice President Environmental Remediation, Stantec

Signature and printed name of party conducting cleanup — Date: 8/24/2016
Frank Aceto, Vice President Environmental Remediation, Stantec

Appendix E – Soil Laboratory Data – April 2016

Appendix F – Remedial Investigation Work Plan for VCP, April 2016 and Remedial Investigation Report for VCP, July 2016

Appendix G - Stockpile Area Construction Detail

40 CFR 761.65(c)(9): Bulk PCB remediation waste or PCB bulk product waste may be stored at the clean-up site or site of generation for 180 days subject to the following conditions:

It is anticipated that soil handling will be a temporary operation during the excavation and loading of soils for transport to a landfill. However, the requirements of ***40 CFR 761.65(c)(9)*** *have been addressed* as follows:

(i) The waste is placed in a pile designed and operated to control dispersal of the waste by wind, where necessary, by means other than wetting.

The liner system will fully encapsulate the soil placed in the soil handling area to control potential for dispersal.

(ii) The waste must not generate leachate through decomposition or other reactions.

The liner system will create an impervious surface between the placed soil and areas above and below. Potential rainfall will be managed by the water collection system to control accumulated water. The soil handling area will be utilized to temporary manage soil for off-site disposal. The temporary soil handling process (i.e., excavation, loading and management) is not anticipated for a period of time that would generate leachate from decomposition or other reactions.

(iii) The storage site must have:

A. A liner that is designed, constructed, and installed to prevent any migration of wastes off or through the liner into the adjacent subsurface soil, ground water or surface water at any time during the active life (including the closure period) of the storage site. The liner may be constructed of materials that may allow waste to migrate into the liner. The liner must be:

1. Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation.

The liner will be constructed of HDPE geotextile that is resistant to PCBs at the anticipated concentrations in soil that will be managed in this area. A 10-mil thick liner is selected to adequately prevent failure and allow for ease of installation and adjustments as necessary. The liner will be inspected daily.

2. Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift.

The soil handling area will be smooth and free of debris. Geotextile fabric will be installed beneath the liner for protection. Care will be taken to not operate tracked machinery on the liner unless protected.

3. Installed to cover all surrounding earth likely to be in contact with the waste.

The liner is installed to entirely cover the soil handling area. The liner will be secured with ballast as needed.

B. A cover that meets the requirements of paragraph (c)(9)(iii)(A) of this section, is installed to cover all of the stored waste likely to be contacted with precipitation,

and is secured so as not to be functionally disabled by winds expected under normal seasonal meteorological conditions at the storage site.

As detailed above, the soil handling procedure meets the requirements of section A. The liner will be installed to cover all soil/materials placed in the soil handling area. The liner will be secured. The detail on E&S plan shows the locations and identifies the requirement to secure the liner.

C. *A run-on control system designed, constructed, operated, and maintained such that:*

1. It prevents flow onto the stored waste during peak discharge from at least a 25-yr storm.

The soil handling area will be positioned such that the entrance is on the upslope side. A 4-inch high asphalt or compacted crushed stone or soil berm will be constructed across the entrance to control surface water run-on.

2. It collects and controls at least the water volume resulting from a 24-hr, 25-yr storm. Collection and holding facilities (e.g. tanks or basins) must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

The soil handling area is estimated to be approximately 16,000 square feet. A 25-yr 24-hr storm for Delaware is 5.87" of rain. This would result in 58,547 gallons of water to be contained and managed. Due to the entrance opening in the jersey barriers and the displacement of the soil stockpiles this volume of water will not be entirely contained in the soil handling area. An automatic sump will be maintained to pump impounded stormwater to the water treatment system. The treatment system will have adequate storage capacity in addition to 24-hr operation capabilities. It should be noted that facility storm water from the soil handling area will drain to onsite storm water containment facilities and monitored under NPDES permits for Outfall 007, 003 and 006. The collection and containment described above will meet the requirements of this section.